

Maria Hastings Elementary School Project

Lexington, MA

Permanent Building Committee and School Committee Meeting 12/21/17



Town of
Lexington
Massachusetts



Agenda

- Design Development Cost reconciliation
- Value Engineering
- VE/Total Project Budget Approvals
- Proprietary Letter Approval (SC Vote)

Reconciliation Recap

- Reconciliation held w/ TOL, DiNisco, Walsh, & DWMP on 12/11/17 @ WBI Office
- Estimates from Walsh Brothers and AM Fogerty were reconciled to a 1% Variance
- AMF Reconciled estimate to be used for DD Submission to MSBA (January 18th, 2018)

Reconciled budget compared to MSBA 3011

Division	Description	SD Cost Estimate (MSBA 3011)		Reconciled DD Estimate - AMF		Delta 3011 - DD
		Total	\$/psf	Total	\$/psf	
	Direct Construction Cost	\$ 39,582,929	\$ 359.84	\$ 42,315,091	\$ 384.68	\$ 2,732,162
	Design Contingency	\$ 3,166,634	8.00%	\$ 2,115,755	5.00%	\$ (1,050,880)
	CM Contingency	\$ 1,282,487	3.00%	\$ 1,332,925	3.00%	\$ 50,438
	Escalation	\$ 1,761,282	4.45%	\$ 1,144,094	2.50%	\$ (617,188)
	General Conditions	\$ 2,643,018	Is	\$ 2,643,018	Is	\$ -
	General Requirements	\$ 2,374,700	Is	\$ 2,478,700	Is	\$ 104,000
	P&P Bond	\$ 431,894	0.85%	\$ 442,251	0.85%	\$ 10,358
	GLI	\$ 691,780	1.35%	\$ 708,370	1.35%	\$ 16,590
	Fee	\$ 1,038,694	2.00%	\$ 1,063,604	2.00%	\$ 24,910
	Total	\$ 52,973,418	\$ 481.58	\$ 54,243,809	\$ 493.13	\$ 1,270,390

\$41,215,000 – Target for Direct Construction cost = approx. \$1.1M for VE to maintain budget

Value Engineering Recap / Process

- 11/9/17 – Review VE Log with PBC
 - PBC reviewed ROMs and confirmed which items should be estimated
 - PBC Requested other TOL feedback on the VE Items
 - School Department – Meeting held with superintendent, principal, and SC rep
 - DPF – Meeting held with Mike Cronin
 - Parks & Recs – Mike Cronin discussed applicable VE Items
 - VE Log updated with comments added
- 12/14 – Present PBC with VE Log
- 12/19 – Present VE Log to School Committee
- 12/21 – Joint SC/PBC Meeting

VE Items recommended by project team to maintain budget

Value Engineering Options		AMF Direct Cost	None	Program	Facilities	School Dept.	PBC	Parks & Recs
A.1	Eliminate greenhouse	(\$65,000)		P	D	Y	P	
B.14	Reduce front entry canopy length by 40% (from 162' to 97')	(\$90,000)		P	D	N	P	
B.2A	Replace cementitious rainscreen (Taktil) with alternate Panel (Design to \$65/SF)	(\$162,000)			P	P	P	
B.4	Eliminate 8" CMU wall with spread footings, clad on one side with a 4" natural stone veneer, and precast concrete cap at Loading Dock	(\$27,000)			P	P	P	
B.6	Delete all exterior sun shades	(\$83,475)			Y	Y	P	
B.11	Replace metal panel cladding at single story exterior walls with GFCMU	(\$101,000)			P	P	P	
B.12	Eliminate finished metal ceiling at cafeteria canopy	(\$24,000)			N	N	P	
B.17	Use utility or Jumbo Brick, not standard size brick	(\$75,000)			P	P	P	
C.15	Replace Tech Zone ceilings in Cafeteria and Library with standard lay-in ceilings	(\$50,000)			P	P	P	
E.1	Reduce L1 & L3 by 50% at light coves at Library	(\$100,000)			P	P	P	
E.4	Provide aluminum feeders - Transformer to Building Gear	(\$10,000)			Y	D	P	
S.1	Delete drainage fill, fabric and underground pipe drains at playfield	(\$100,000)			D	D	P	Y
S.2	DPW to perform irrigation at field scope (DPW to gurantee value)	(\$20,000)			D	D	P	D
S.5	Replace concrete paving with bituminous paving (sidewalks only)	(\$82,000)			P	P	P	
X.1	Eliminate drywall acoustically ceiling over Cafeteria	(\$70,200)						
X.2	Replace radial ceiling at cafeteria perimeter with 2x2 tegular	(\$20,000)			P	P	P	
VEA.2	Early Construction start - 6/8 start	\$0			Y	P	P	

\$ (1,079,675)

Reconciled budget w/ VE compared to SD Budget

Description	3011		Reconciled DD Estimate - AMF		Reconciled DD w/ VE	
	Total	\$/psf	Total	\$/psf	Total	\$/psf
Direct Construction Cost	\$ 39,582,929	\$ 359.84	\$ 42,315,091	\$ 384.68	\$ 41,235,416	\$ 374.87
Design Contingency	\$ 3,166,634	8.00%	\$ 2,115,755	5.00%	\$ 2,061,771	5.00%
CM Contingency	\$ 1,282,487	3.00%	\$ 1,332,925	3.00%	\$ 1,298,916	3.00%
Escalation	\$ 1,761,282	4.45%	\$ 1,144,094	2.50%	\$ 1,114,903	2.50%
General Conditions	\$ 2,643,018	ls	\$ 2,643,018	ls	\$ 2,643,018	ls
General Requirements	\$ 2,374,700	ls	\$ 2,478,700	ls	\$ 2,478,700	ls
P&P Bond	\$ 431,894	0.85%	\$ 442,251	0.85%	\$ 432,078	0.85%
GLI	\$ 691,780	1.35%	\$ 708,370	1.35%	\$ 692,075	1.35%
Fee	\$ 1,038,694	2.00%	\$ 1,063,604	2.00%	\$ 1,039,138	2.00%
Total	\$ 52,973,418	\$ 481.58	\$ 54,243,809	\$ 493.13	\$ 52,996,013	\$ 481.78
Comparison to 3011			\$ 1,270,390		\$ 22,595	

Direct Construction Cost \$42,315,091 – VE Items \$1,079,675 = \$41,235,416

Remaining VE Items

Value Engineering Options		AMF Direct Cost	AMF Total Cost (w/ markups)	Program	Facilities	School Dept.	PBC	Parks & Recs
C.12	Delete recessed picture rail system at corridors	(\$2,940)	(\$3,372)	P	N	N	P	
C.13	Delete millwork in Teacher Work rooms	(\$11,340)	(\$13,007)	P	N	N	P	
C.17	Eliminate Ware Washer	(\$15,000)	(\$17,205)	P	N	N	P	
E.2	Eliminate Speech Reinforcement System	(\$163,200)	(\$187,190)	P	D	N	N	
E.3	Eliminate Speech Reinforcement System from 12 classrooms (Leave system in 3 classrooms per grade)	(\$38,400)	(\$44,045)	P	D	N	N	
M.3	Use two-pipe chilled beam system instead of four-pipe	(\$135,000)	(\$154,845)	P	N	N	P	
O.2	Eliminate gym bleachers	(\$20,000)	(\$22,940)		N	D	P	N
S.3	Reduce amount of playground safety surface by 50%	(\$85,000)	(\$97,495)	P	D	N	P	
S.4	Delete urethane play surface - carry engineered wood play surface	(\$105,000)	(\$120,435)	P	N	N	P	
S.7	Delete One of the two basketball courts	(\$45,000)	(\$51,615)	P	D	N	P	
A.2	Terminate Stair C at Third Floor (currently scope includes headhouse at Stair C for roof access)	(\$72,500)	(\$83,158)		N	D	N	
B.3	Replace aluminum panel cladding at main entry with glazed CMU	(\$35,000)	(\$40,145)		P	P	P	
C.1	Eliminate ceramic tile at Project Area portals. Replace with abuse resistant GWB, painted	(\$31,000)	(\$35,557)		N	N	P	
C.2	Replace epoxy floors @ Kitchen wth sheet vinyl	(\$12,500)	(\$14,338)		N	D	P	
C.4	Replace wood cabinets over student lockers @ Project Areas with P-Lam (wood grain)	(\$20,000)	(\$22,940)		N	N	P	
C.7	Eliminate tile wainscot @ Level 1, 2 & 3 Academic Corridors, replace with abuse resistant GWB	(\$30,000)	(\$34,410)		N	D	P	
C.8	Eliminate tile wainscot at 1st floor Community Wing, Replace with abuse resistant GWB.	(\$25,430)	(\$29,168)		N	D	P	
C.9	Delete solid plywood backing at toilet rooms, install blocking only in areas required	(\$22,000)	(\$25,234)		N	D	P	
C.10	Replace Linoleum Tile with VCT	(\$155,962)	(\$178,888)		N	N	P	
C.11	Delete ceramic wall tile at gang toilets on three non-plumbing walls. Reduce wet wall CT to 5'-2" wainscot	(\$45,000)	(\$51,615)		N	N	P	
C.14	Simplify Cafeteria Clouds/Platform Clg - Replace wood ceiling at proscenium with drywall, painted	(\$15,000)	(\$17,205)		P	P	P	
C.16	Replace wood stage floor with Linoleum (Treads, Risers, and Apron to remain wood)	(\$4,000)	(\$4,588)		N	N	P	
C.18	Use painted Mtl Handrails / Guardrails at Stairs ILO of St Stl	(\$75,000)	(\$86,025)		N	N	P	
C.19	Use freestanding Benches (Fastened) at alcoves ILO custom millwork	(\$5,000)	(\$5,735)		N	N	P	
VEA.1	Add PV to parking lot	TBD			Y	P	P	
VEA.3	Radon Mitigation System	\$31,000	\$35,557		Y		P	

Total Project Budget

Total Construction Cost (including recommended VE)	\$52,973,418
Soft Costs	\$10,306,000
Owner's Contingency (Construction & Owner)	\$2,000,000
TOTAL PROJECT BUDGET	\$65,279,418

Proprietary items

- ExacqVision Software – Security Camera Management System software used uniformly throughout the District
- Vivotec Security Cameras – FD8167A dome camera, IB8379-H bullet network camera, FE8181 (V) fish eye camera, and CC8370-HV Anti Vandal fish eye camera. Standard cameras (80%) used uniformly throughout the District.
- DSX software, controls, and equipment - Access control system used uniformly throughout the District.
- Aiphone AX - Entry door communication devices used uniformly throughout the District.
- LCN door closure unit – Standard hardware used throughout the District.
- Von Duprin door exit devices – Standard hardware used throughout the District.

Approvals

- VE items to incorporate into design
- Total project budget for MSBA Design Development submission
- Proprietary items (SC Vote required)

Thank you

Design Development | View From Entry Drive



Design Development | East Elevation



Design Development | South & North Elevations



South Elevation



North Elevation

Design Development | Cafeteria View

